Cooperation, collective action and formal models of strategy

Academic Year: (2023 / 2024)

Review date: 29-04-2022

Department assigned to the subject: Social Sciences Department

Coordinating teacher: MEDINA SIERRA, LUIS FERNANDO

Type: Electives ECTS Credits : 6.0

Year : Semester :

DESCRIPTION OF CONTENTS: PROGRAMME

1. Introduction: The rational-choice paradigm in the social sciences. The use of deductive methods and the role of rationality.

2. Decision theory (I): Mathematical representation of individual preferences. The ¿median voter theorem¿ in questions of political competition.

3. Decision theory (II): Individual choice under uncertainty. Risk-aversion and expected utility.

4. Static, non-cooperative games (I): Common knowledge. The concept of strategic dominance.

5. Static games (II): Nash equilibrium.

6. Static games (III): Coordination failures and collective-action problems. The problem of multiplicity of equilibria.

7. Repeated games: ¿Folk theorems; and the emergence of norms of reciprocity and cooperation. Endogenous emergence of roles and institutions.

8. Theory of bargaining.

9. Games of imperfect information: Signaling games. Deterrence problems in situations of conflict (prevention and escalation).

10. Cooperative games: Criteria of resource allocation in groups.

% end-of-term-examination:	60
% of continuous assessment (assigments, laboratory, practicals):	40